



$V_{+Bus} = 28V, V_{DD} = 5V, R_{DD} = 14.59k\Omega, f_{sw} = 500kHz, V_{ss,bias} = 0V, I_{QCC} = 3mA, V_{cc} = 12V, Q_g = 26nC, R_o = 10\Omega, R_g = 2,7\Omega, R_{g(int)} = 10\Omega, V_{Bus} = 0,5V, I_{QBS} = 1mA, V_{BS} = 28V$

$$P_{MID} = P_{ZDD} + P_{LDD} \approx \frac{V_{+BUS} - V_{DD}}{R_{DD}} \cdot V_{DD}$$

$$P_{LSM} = 2 \text{ nC} \times f_{sw} \times V_{SS,BIAS}$$

$$P_{LOW} = P_{LDD} + P_{LO}$$

$$= (I_{QCC} \cdot V_{CC}) + \left(V_{CC} \cdot Q_g \cdot f_{sw} \cdot \frac{R_o}{R_o + R_g + R_{g(int)}} \right)$$

$$P_{LSH} = 0.4 \text{ nC} \times f_{sw} \times V_{BUS}$$

$$P_{HIGH} = P_{LDD} + P_{HO}$$

$$= (I_{QBS} \cdot V_{BS}) + \left(V_{BS} \cdot Q_g \cdot f_{sw} \cdot \frac{R_o}{R_o + R_g + R_{g(int)}} \right)$$

$$P_{tot} \approx 0,55W$$